

# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,385 03/03/2004		Norimasa Shigeta	Q80073	3523
23373 SUGHRUE M	7590 05/01/2007 ION, PLLC		EXAMINER	
2100 PENNSYLVANIA AVENUE, N.W.			WASHINGTON, JAMARES	
	SUITE 800 WASHINGTON, DC 20037		ART UNIT	PAPER NUMBER
			2609	
			MAIL DATE	DELIVERY MODE
			05/01/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/791,385	SHIGETA, NORIMASA				
Office Action Summary	Examiner	Art Unit				
	Jamares Washington	2609				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the	correspondence address				
• •	/ IO OET TO EVOIDE A MONTH	VOY OF THEFTY (ON PAYO				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period v  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  36(a). In no event, however, may a reply be the string and will expire SIX (6) MONTHS from a cause the application to become ABANDON	N. mely filed n the mailing date of this communication. ED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on						
2a)☐ This action is <b>FINAL</b> . 2b)☒ This	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.				
Disposition of Claims	,	•				
4)⊠ Claim(s) <u>1-4</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-4</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	r election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10)⊠ The drawing(s) filed on <u>03 March 2004</u> is/are: a		to by the Examiner.				
Applicant may not request that any objection to the	drawing(s) be held in abeyance. Se	ee 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is o	bjected to. See 37 CFR 1.121(d).				
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Offic	e Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)⊠ All b)☐ Some * c)☐ None of:						
<ol> <li>Certified copies of the priority documents</li> </ol>	1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No						
	3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)  Notice of References Cited (PTO-892)	4) 🔲 Interview Summar	W/FITO 442)				
2) Notice of Praftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail [	Date				
3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date 11/17/2006, 03/03/2004.  5) Notice of Informal Patent Application 6) Other:						
Paper No(s)/Mail Date <u>11/17/2006, 03/03/2004</u> . 6)  Other:						

Art Unit: 2609

### **DETAILED ACTION**

## **Priority**

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

# Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Kazuo Sanayagi (US 5355440).

Regarding claim 1, Sanayagi discloses a color conversion relation derivation method of deriving a color conversion relation between a first color space and a second color space

Art Unit: 2609

("...upon receiving an input of a color signal in a color [space] different from the XYZ color [space]...converts the color signal from these color [spaces] to the XYZ color [space]" at column 12 line 30), the color conversion relation derivation method comprising:

an area forming step that forms a plurality of areas filling the first color space (Fig. 2, "area ratios" described at column 3 line 36);

a partial function derivation step that derives, for each of the areas formed in the area forming step, a partial function representative of a color conversion between coordinates in the area and coordinates of the second color space using a set of an arbitrary sample point provided in the first color space and a point in the second color space, which is associated with the sample point ("First, if the Neugebauer equation given by Eq. (A3) is partially differentiated with regard to A<sub>Y</sub>, A<sub>M</sub>, A<sub>C</sub>…" at column 6 line 7); and

a whole function derivation step that combines the partial functions for the respective areas derived by the partial function derivation step to derive a whole function representative of the color conversion relation through the first color space in its entirety (Eq. (A7) column 6 line 42-45).

Regarding claim 2, Sanayagi discloses a color conversion relation derivation method according to claim 1, wherein the area forming step forms, as the plurality of areas, a plurality of areas overlapping with one another (Fig. 2), and the whole function derivation step combines the partial functions in a range that the areas are overlapped with one another ("...the Neugebauer equations which accurately describe the actual phenomenon wherein color printing...is reproduced by a mean additive color "mixture"..." at column 13 line 34. The purpose behind the

Art Unit: 2609

Neugebauer equations is to obtain different shades of colors by the mixing of the 4 set colors described throughout the reference; therefore the whole function derivation step would combine the partial functions in a range where the colors "overlap" or "mix" to obtain the new shade).

Regarding claim 3, Sanayagi discloses a color conversion relation derivation apparatus for deriving a color conversion relation between a first color space and a second color space, the color conversion relation derivation apparatus comprising:

an area forming section that forms a plurality of areas filling the first color space;
a partial function derivation section that derives, for each of the areas formed in the area
forming section, a partial function representative of a color conversion between coordinates in
the area and coordinates of the second color space using a set of an arbitrary sample point
provided in the first color space and a point in the second color space, which is associated with
the sample point;

and a whole function derivation section that combines the partial functions for the respective areas derived by the partial function derivation section to derive a whole function representative of the color conversion relation through the first color space in its entirety (Fig. 4 shows an embodiment of the "color image processing apparatus of the invention" which performs the method as rejected in claim 1 above at column 12 line 38).

Application/Control Number: 10/791,385 Page 5

Art Unit: 2609

## Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kazuo Sanayagi (US 5355440) and well known principles in the art of image processing.

Regarding claim 4, Sanayagi discloses a color conversion relation derivation method performed by an apparatus as rejected above ("This invention relates to a color image processing method and apparatus..." at column 1 line 7).

Sanayagi fails to teach a program storage medium storing a color conversion relation derivation program which causes a computer to operate as a color conversion relation derivation apparatus, when the color conversion relation derivation program is incorporated into the computer and is executed, the color conversion relation derivation apparatus comprising:

an area forming section that forms a plurality of areas filling the first color space; a partial function derivation section that derives, for each of the areas formed in the area forming section, a partial function representative of a color conversion between coordinates in the area

Application/Control Number: 10/791,385

Art Unit: 2609

and coordinates of the second color space using a set of an arbitrary sample point provided in the first color space and a point in the second color space, which is associated with the sample point;

and a whole function derivation section that combines the partial functions for the respective areas derived by the partial function derivation section to derive a whole function representative of the color conversion relation through the first color space in its entirety.

However, it is clear from the disclosure of the reference that the processing method is carried out by an apparatus. It is well known in the image processing arts that a computer implemented method performed by an apparatus must receive "instructions" from a program residing on a computer readable medium in order for the apparatus to be operational. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a program storage medium storing the program, in the invention disclosed by Sanayagi, to make the apparatus operational. (Official Notice)

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamares Washington whose telephone number is (571) 270-1585. The examiner can normally be reached on Monday thru Friday: 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Werner can be reached on (571) 272-7401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jamares Washington
Junior Examiner
Art Unit 2609

04/19/07

BRIAN WERNER
SUPERVISORY PATENT EXAMINER